274 367

HEADQUARTERS
UNITED STATES CONTINENTAL ARMY COMMAND
FORT MONROE, VIRGINIA

ATDEV-3 474 **10 July 1961**

SUBJECT: Report of Project Nr 2922, Evaluation of Modified Feed System for Gun, Machine, 7.62mm, M60

TO: Chief of Research and Development
Department of the Army
Washington 25, D. C.

1. Inclosed is a copy of subject report prepared by the US Army Infantry Board.

2. This headquarters concurs in the conclusions of the Infantry Board in paragraph 6 of inclosed report.

3. This headquarters recommends that:

a. No further consideration be given to the Type B Modified Feed System.

b. The Machine Gun Bandoleer, T-7, be modified to provide adequate durability. When so modified, it be type classified Standard A for packaging 7.62mm Machine Gun Ammunition in lieu of the T-4 Bandoleer.

c. Subject to completion of the action recommended in b above, the Type A Modified Feed System be incorporated into the design of the Gun, Machine, 7.62mm, M60, to replace the mounting bracket-canvas magazine combination.

4. It is requested that this headquarters, ATTN: Deputy Chief of Staff for Materiel Developments, be notified of action taken.

FOR THE COMMANDER:

William A. Keil

WILLIAM A. KEIL
Major, AGC
Asst Adjutant General

1 Incl
USAIB Rept of Proj
Nr 2922, 8 Jun 61,
w/5 incl

Copies furnished:
G

UNITED STATES ARMY INFANTRY BOARD
Fort Benning, Georgia

ATBC (P-2922) 8 June 1961

SUBJECT: Report of Project Nr 2922, Evaluation of Modified Feed System for Gun, Machine, 7.62mm, M60

TO: Commanding General
United States Continental Army Command
ATTN: MD
Fort Monroe, Virginia

1. Reference is made to:

a. Report of Project Nr 2704 (Temp), Board Nr 3, CONARC, 31 Jul 56, subject: "Service Test of General Purpose Machine Gun (DA Project 502-08-011)."

b. Report of Project Nr 2704X, USA Inf Bd, 9 Oct 59, subject: "Confirmatory Test of Production Model Machine Gun, 7.62mm, M60, and Associated Equipment (DA Project 502-08-011)."

c. Ltr, ATBC, USA Inf Bd, 3 Aug 60, subject: "Record of Conference on Modified Feed System for M60 Machine Gun, 7 Jul 60."

d. Ltr, ATDEV-3 474, Hq USCONARC, 22 Nov 60, subject: "Evaluation of Modified Feed System for Gun, Machine, 7.62mm, M60."

2. The purpose of this evaluation was to determine the suitability for Army use of the modified feed system on the Gun, Machine, 7.62mm, M60.

3. The modified feed system is essentially a modified feed plate. It consists of an extension of the feed plate of the M60 Machine Gun which forms a hook that accepts a modified 100-round bandoleer (see Incls 1 and 2). The rollers of the current feed plate were removed and a hook device was attached. Two versions of this hook device were furnished for evaluation. One permits the loop of the bandoleer to slip to the bottom of the hook; the other has a modification which stops the bandoleer loop midway in the hook. Both have projections at the top of the hook to prevent the bandoleer from coming off inadvertently. (See Incl 1). The former is hereafter referred to as the Type A test item or modified feed system and the latter as the Type B test item or modified feed system. Modified T-4 bandoleers, designated as T 7 bandoleers, were also furnished for this evaluation. The bandoleer modifications included the addition of a horizontal cloth strap to form a shallow loop on one side of the bandoleer at the top, and the attachment of the bandoleer carrying strap below the

horizontal cloth strap. (See Incl 3). The control item was the current feed system consisting of a magazine mounting bracket and a heavy metal-backed canvas magazine. (See Incl 4). The test materiel was received on 21 February 1961. No maintenance package was received and none was considered necessary.

4. The current feed system was tested during the service test of the General Purpose Machine Gun in 1956. At that time it was considered acceptable, but recommendations were made for improvement. The magazine mounting bracket and the canvas magazine were considered too bulky and complicated, and were difficult to use. Subsequently, Ordnance proposed a different feed system based on the idea that factory packed bandoleers containing the machine gun ammunition could be attached directly to the M60 Machine Gun. This would eliminate the cumbersome mounting bracket and the heavy canvas magazine. With a simplified mounting bracket the soldier would have more readily available a 100-round cloth magazine. In July 1960, representatives of Springfield Armory visited this Board and demonstrated a system incorporating these desirable features. As a result of this visit it was recommended that the demonstration system be furnished for evaluation. It is not known whether or not this item is proposed for Tripartite standardization.

5. Summarized below are the salient results of test:

a. The M60 Machine Gun equipped with the test item, with 100 rounds of ammunition in a T-7 bandoleer attached, weighed 1.2 lbs. less than an M60 Machine Gun equipped with the current mounting bracket and canvas magazine filled with 100 rounds of ammunition.

b. Approximately 12,000 rounds were fired from each of four M60 machine guns equipped with modified feed systems. The ammunition was fed from various containers that were not attached to the gun. No interference from the hook on the modified systems was noted.

c. There was no difference in the ease of attachment of a loaded T-7 bandoleer to the hooks of the Type A and Type B test items. Both types were easier to attach than was the control item. Reloading with 100-round bandoleers was much quicker using either of the test items than it was using the control item.

d. The Type B test item was more satisfactory than the Type A test item for hip and shoulder firing. The stops on the Type B test item prevented the bandoleer from interfering with the manipulation of the trigger. However, in this role there was no significant difference between either test item and the control item.

e. There was no difference between the capabilities of the Type A or Type B test items and the control item to retain a 100-round bandoleer when the gun was carried by a walking soldier. However, when the soldier ran, jumped, crawled and then changed the carrying position of the gun with the bandoleer attached, the bandoleer frequently came off theType B test item. This seldom happened with the Type A test item and the control item.

f. The T-7 bandoleer furnished for this evaluation lacked durability. In all tests involving soldiers running, jumping, and making other vigorous movements with a loaded bandoleer attached to the M60 Machine Gun, the bandoleer tore in various places on the side next to the gun. This occurred shortly after the start of the exercises and frequently caused the bandoleer to come off the hook. Most of the tears began in corners below the carrying strap (see Incl 5). The fabric of the T-7 bandoleers furnished for this evaluation was of a somewhat lighter material than that of the T-4 bandoleers currently being issued. One modification was made locally to the T-7 bandoleer. The cloth strap that formed the shallow loop for attachment to the hook was extended completely around the top of the bandoleer in an effort to strengthen the points of stress. (See Incl 3). The exercises outlined in paragraph 5e were then repeated using the modified T-7 bandoleer. The results were satisfactory. In addition, this type bandoleer, with 100-rounds of ammunition, was attached to a M60 Machine Gun and carried on a 6 mile tactical march over varied terrain. The results were satisfactory.

6. The US Army Infantry Board concludes that:

a. The Type A Modified Feed System, when used in conjunction with a bandoleer identical to the Machine Gun Bandoleer, T-7, is superior to the mounting bracket-canvas magazine combination used on the Gun, Machine, 7.62mm, M60, and is suitable for Army use.

b. The Type B Modified Feed System for the Gun, Machine, 7.62mm, M60, is not suitable for use with the Gun, Machine, 7.62mm, M60.

c. The design of the Machine Gun Bandoleer, T-7, is suitable for use with the Type A Modified Feed System for the Gun, Machine, 7.62mm, M60. However, this bandoleer lacks the desired durability.

7. It is recommended that:

a. No further consideration be given to the Type B Modified Feed System.

b. The Machine Gun Bandoleer, T-7, be modified to provide adequate durability. When so modified, it be type classified Standard A for packaging 7.62mm machine gun ammunition in lieu of the T-4 Bandoleer.

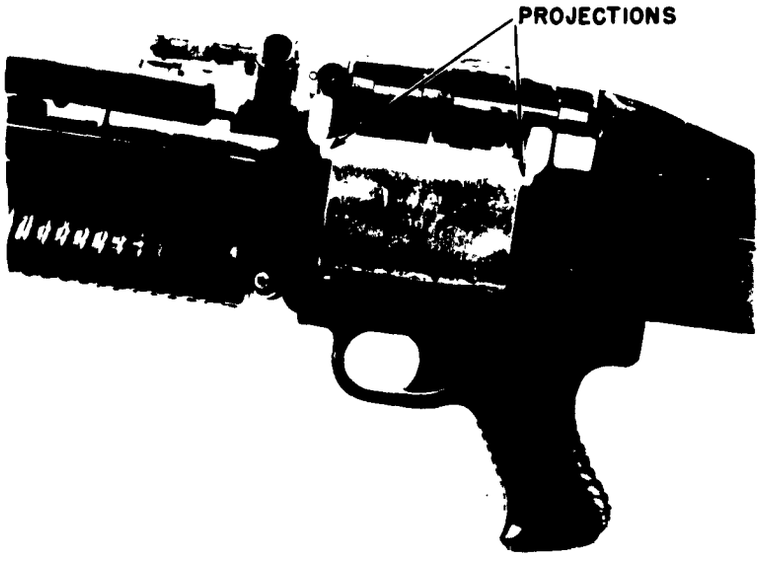
c. Subject to completion of the action recommended in b above, the Type A Modified Feed System be incorporated into the design of the Gun,

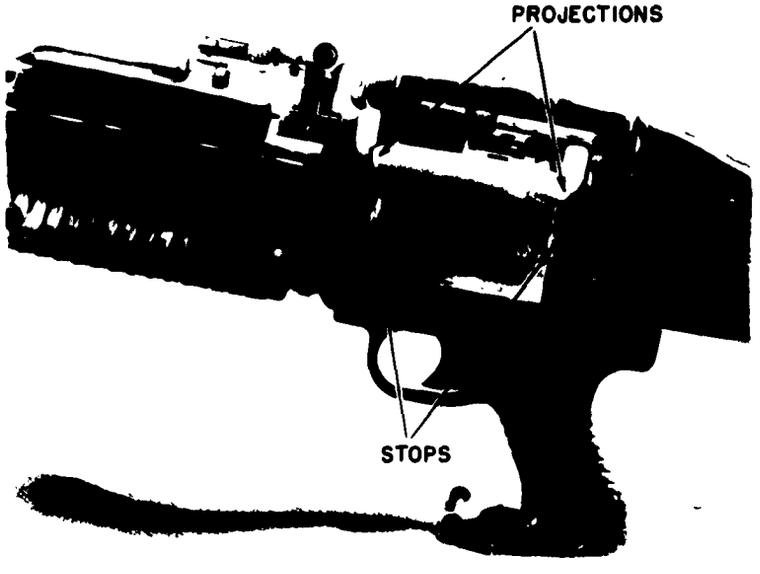
Machine, 7.62mm, M60, to replace the mounting bracket-canvas magazine combination.

WILLIAM M. SUMMERS
Colonel, Infantry
President

5 Incl
1. Photo Neg Nr 09-166-520/AJ-61
2. Photo Neg Nr 09-166-521/AJ-61
3. Photo Neg Nr 09-166-522/AJ-61
4. Photo Neg Nr 09-166-523/AJ-61
5. Photo Neg Nr 09-166-524/AJ-61

DISTRIBUTION:
14 - CG, USCONARC, ATTN: MD
2 - Board File





UNITED STATES ARMY INFANTRY BOARD
FORT BENNING, GEORGIA

PROJECT NR	DATE	NEGATIVE NR
P-2922	7 June 61	09-166-520/AJ-61

EVALUATION OF MODIFIED FEED SYSTEM FOR GUN, MACHINE, 7.62mm, M60

TOP - Type A Modified Feed System (Test)

BOTTOM - Type B Modified Feed System (Test)

Incl 1

UNITED STATES ARMY INFANTRY BOARD

FORT BENNING, GEORGIA

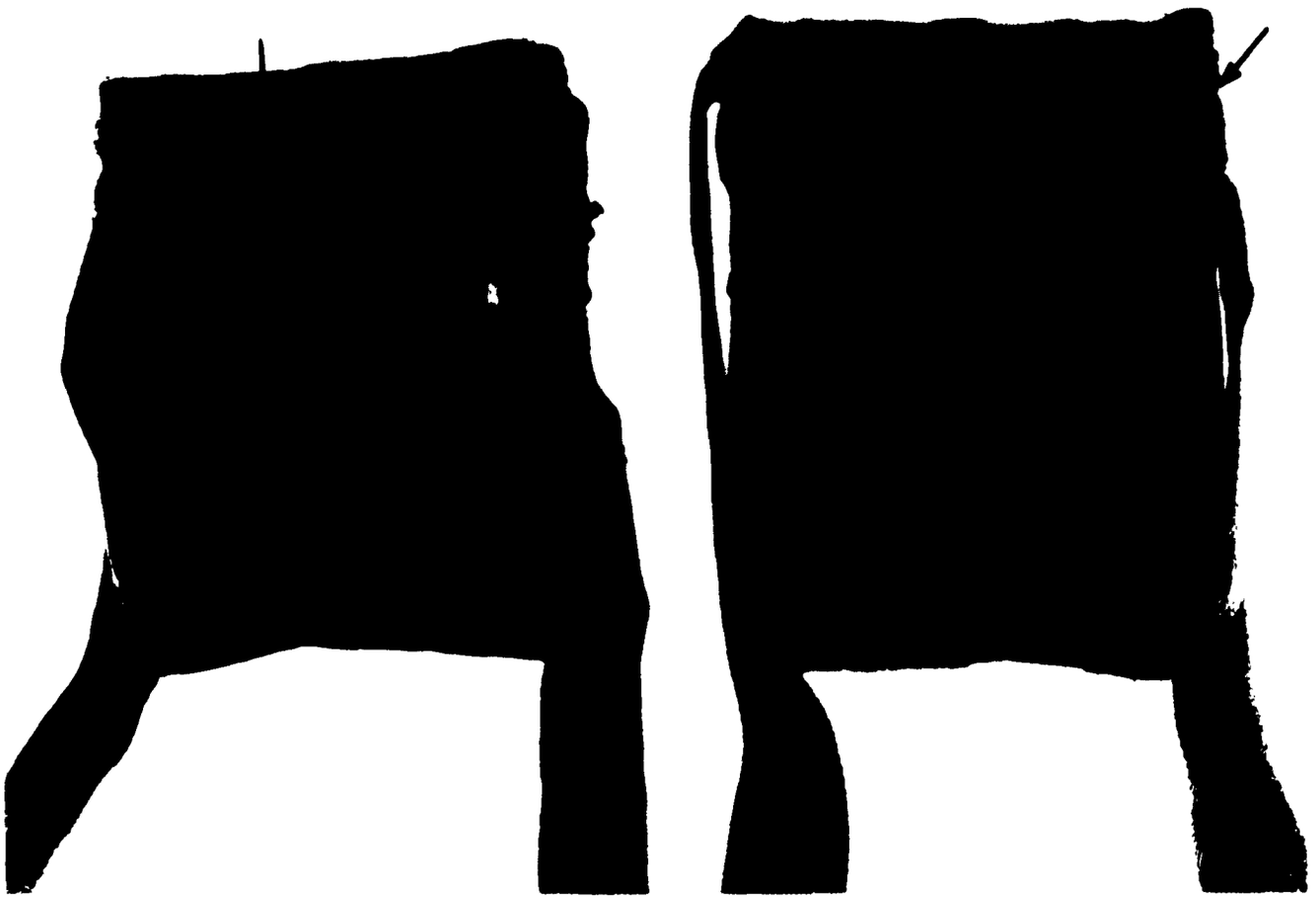
PROJECT NR	DATE	NEGATIVE NR
P-2922	7 June 61	09-166-521/AJ-61

EVALUATION OF MODIFIED FEED SYSTEM FOR GUN, MACHINE, 7.62mm, M60

TOP - T-7 Bandoleer Attached to Type A Modified Feed System (Test)

BOTTOM - T-7 Bandoleer Attached to Type B Modified Feed System (Test)

Incl 2



UNITED STATES ARMY INFANTRY BOARD
FORT BENNING, GEORGIA

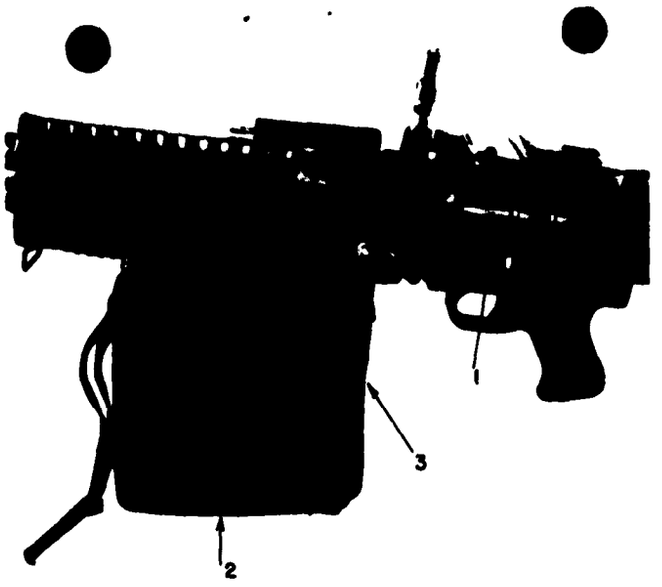
PROJECT NR	DATE	NEGATIVE NR
P-2922	7 June 61	09-166-522/AJ-61

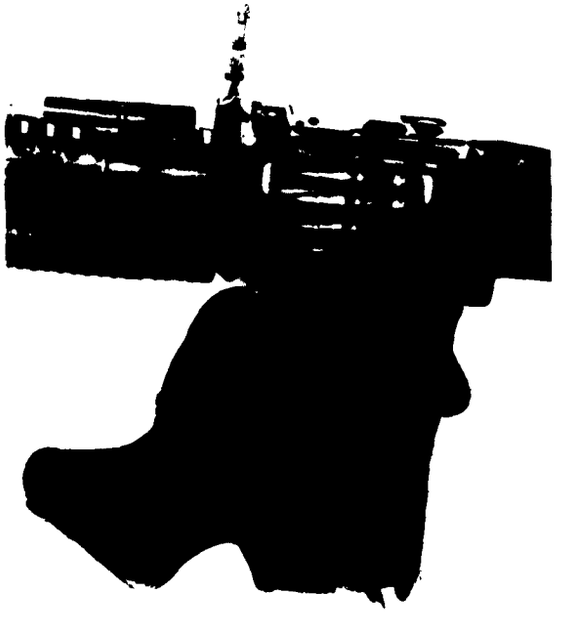
EVALUATION OF MODIFIED FEED SYSTEM FOR GUN, MACHINE, 7.62mm, M60

RIGHT - Side View of T-7 Bandoleer Showing Horizontal Attachment Strap

LEFT - Locally Modified T-7 Bandoleer with Horizontal Attachment Strap Sewn on Completely Around Bandoleer

Incl 3





UNITED STATES ARMY INFANTRY BOARD
FORT BENNING, GEORGIA

PROJECT NR	DATE	NEGATIVE NR
P-2922	7 June 61	09-166-523/AJ-61

EVALUATION OF MODIFIED FEED SYSTEM FOR GUN, MACHINE, 7.62mm, M60

TOP - Magazine Mounting Bracket and Canvas Magazine for M60 Machine Gun (Control):

1. Mounting Bracket
2. Canvas Magazine
3. Metal Backing Plate

BOTTOM - Canvas Magazine Attached to M60 Machine Gun (Control)

Incl 4

UNITED STATES ARMY INFANTRY BOARD
FORT BENNING, GEORGIA

PROJECT NR	DATE	NEGATIVE NR
P-2922	7 June 61	09-166-524/AJ-61

EVALUATION OF MODIFIED FEED SYSTEM FOR GUN, MACHINE, 7.62mm, M60

Following Running and Jumping Exercises by Soldiers Carrying a M60 Machine Gun, These Typical Tears Were Noted in T-7 Bandoleers That Had Been Attached to the Modified Feed System

Incl 5